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**TITLE :** CHOROIDAL MELANOMA BRACHYTHERAPY WITH IODINE 125

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**Purpose :** The authors report their short and mean term results in a series of 41 patients treated with I 125 brachytherapy for uveal or ciliary body melanomas with minimal follow up of one year.

**Methods :** Among the 47 patients treated with I 125 brachytherapy for intraocular melanomas we selected 41 patients with minimal follow-up of one year. The dose delivered at the apex was 100 Gy calculated with the USCLA optimization software developed by Melvin Astrahan, USCLA.

**Results :** Tumor stabilization or regression was obtained in 96,5 % cases, local complications include cataracts in 24 % cases and radiation retinopathy or neuropathy in 30 %. Metastases have occurred in 15 % cases.

**Conclusion :** Dose calculation for delivery 100 Gy at tumor apex results in good tumor control but induces frequent local complications despite dosimetric optimization.

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**TITLE :** BRACHYTHERAPY with Ru 106: the TREATMENT of POSTERIOR CHOROIDAL and RETINAL TUMORS.

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**OBJECTIVE:** The radiotherapy has demonstrated to be in the last year the most effective conservative treatment of choroidal tumors. External beam irradiation using charged particles, as protons and helium ions, has been used preferably for posterior tumors, while brachytherapy was reserved for tumors located anteriorly, in the ciliary body or peripheral choroid. The development of new plaques permits the treatment of more posterior tumors of the retina and choroid.

**MATERIALS and METHODS:** We present the treatment of 18 intraocular tumors located in the posterior pole: 16 choroidal melanomas, 1 choroidal metastasis and 1 retinoblastoma. The tumors ranged from 7.5 to 16 mm in diameter, and from 3.5 to 7.6 in elevation. The location was posterior to the equator in all the cases: 77 % of the tumors were located temporal to the optic disk, including the macular area in 38 %. Conventional scleral surgery was performed, placing the radioactive plaque of Ru 106 on the sclera, choosing the diameter and configuration of the plaque according to the size and location of the tumor. The plaque removal was accomplished between 3 and 10 after its placement.

**RESULTS:** The postoperative results were satisfactory in all the patients, with tumor regression and disappearance of the exudative retinal detachment. The mean decrease of the tumor thickness measured by ultrasound was 25 % in the choroidal melanomas, and 80 % in the retinoblastoma and metastases. A subretinal hemorrhage nasal to the optic disk was observed in an eye with a choroidal melanoma, after the plaque removal. Another patient developed a vitreous hemorrhage that reabsorbed spontaneously. The minimal follow-up has been of 10 months.

**DISCUSSION:** The irradiation with Ru 106 plaques reduces the iatrogenic effects at the level of the anterior segment, compared to the charged particles irradiation. The decrease of complications rate observed in radioactive plaques placement, and the high efficiency in tumor regression, avoiding exudative changes post-irradiation, advise their use in posterior tumors of the retina and choroid as the treatment of choice.

## P 113

**TITLE :** The role of organ-saving methods in treatment of patients with uveal melanoma.

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**INSTITUTION :** Microsurgery and Laser Centre, North-West, Russia.

**Purpose :** To analyse the efficiency of the system of care for the patients with uveal melanoma during last 4 years in St Petersburg.

**Methods :** Selection of patients for organ-saving treatment in the out-patient oncology department (surgical ablation, brachytherapy 300 Gy on the top of the tumor, laser ablation therapy with a quasicontinuous-wave high powered YAG-laser), long-term follow-up.

**Results :** 80 % from 92 patients with malignant uveal melanoma have got organ-saving treatment, but in 5 cases the reoperation was needed. The eyeball was saved in 67 cases, in 42 cases with practically useful visual acuity. Lethal outcomes were observed no more often than in enucleation group.

**Conclusion :** The system of organization of ophthalmological care regarding uveal melanoma that we did accept ensures rather high efficiency in organ-saving treatment.

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**TITLE :** A suspected case of malignant choroidal melanoma.

**AUTHORS :** C. MOSCI, L. RAVAZZONI, A. POLIZZI, R. OLDANI, F. CARDILLO PICCOLINO.

**INSTITUTION :** Genoa Study Group For Intraocular Tumors.

**Purpose :** Examination by the Genoa study group of patient (male, white, healthy, 46 years old) with a suspected case of malignant choroidal melanoma.

**Methods :** Right eye presents juxtapapillary tumor, central vein occlusion, vitreous hemorrhage and visual acuity 20/25. Left eye presents vascular abnormalities on the optic disc, some light hemorrhages in the inferior temporal retina, visual acuity 20/20. Occularecography, ICG, monoclonal-antibody-immun.

**Results :** Right eye: there is a modification of the aspect and size reduction of the juxtapapillary tumor, decreased manifestation of the central vein occlusion, disappearance of the.

**Conclusion :** vitreous hemorrhage and improvement of the visual acuity to 20/20. Left eye: no modifications. The author discusses the case.